

NEW SPECIES OF NORTH AMERICAN OSTOMIDAE  
(Coleoptera)

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In 1915, I published in the Bulletin of the Brooklyn Entomological Society, descriptions of a number of new species of the genera *Nemozoma* and *Corticotomus* and gave a short review of the known species found north of Mexico. In 1916, in the same journal, I described another *Nemozoma*, the name of which had to be modified later because it was found to have been previously used in the same genus. In 1918, in the Journal of the New York Entomological Society, Schaeffer contributed an article in which he described new species in both *Nemozoma* and *Corticotomus* while in 1916, Casey described in his Memoirs, a closely related genus and made certain remarks concerning *Corticotomus*. Recently, other undescribed species of both *Nemozoma* and *Corticotomus* as well as a related species which will have to have a new genus erected for it, have come into my hands. These recent additions I will now describe and inasmuch as there is still considerable confusion concerning previously described species and some new information, make revised synopses of the two genera.

*Nemozoma cupressi* Van Dyke, new species

Elongate, about five times as long as broad, cylindrical, moderately shining, black with a rufous patch covering a little more than a fourth of the base of the elytra yet not reaching the lateral margins, and the three segments of the antennal club also somewhat rufous. Head about one-eighth longer than broad, deeply sulcate anteriorly and with an acute angular emargination in front with the apices of its lateral boundaries slightly everted, with distinct and well spaced punctures and a linear groove at the bottom of the sulcus and at the base of the head in line with it; antennae 11—segmented, reaching the base of head, segments 2-8 small, 3-8 gradually broader and as a whole subequal in length to the club the first two segments of which are almost three times as broad as the eighth segment; eyes moderately large but much flattened as seen from above as they hardly project beyond the side margin of the head. Prothorax equal to the head in length, narrower at base than elytra, gradually broader toward apex where about equal in breadth to head and elytra, disk convex, with punc-

tures similar to those of head, side and basal margin fine. Elytra about twice as long as broad, sparsely, finely and irregularly punctured except near base and suture where arranged in rows, the general surface also less shining than head and pronotum, and the apex with the sutural striae well impressed. Beneath rather finely and sparsely punctured on head and entire thorax and still more finely punctured on abdomen. Length, 6.5 mm.; breadth, 2 mm.

*Holotype* (No. 5426, Mus. Calif. Acad. Sci., Ent.) and one *paratype*, the latter 7.5 mm. in length, both beaten from Sargent cypress at OCCIDENTAL, SONOMA COUNTY, CALIFORNIA, August 1, 1939, by Arthur T. McClay. The paratype is in the collection of Mr. McClay.

This species is in general a bit larger than *N. fissiceps* (Fall), our largest species hitherto described and somewhat similar except that the latter has the pronotum an orange red and the legs as well as base of elytra reddish, and elytral punctures more regularly arranged. *N. attenuatum* Van Dyke is smaller and much narrower, more attenuated, has somewhat rufous legs as well as 10 segmented antennae; *N. punctulata* Van Dyke is similarly colored, smaller, has the orange patch at base of elytra more extensive and the elytral punctures more regular; while *N. schwarzi* Schaeffer is very much smaller, has shorter elytra and orange patches near apices of elytra as well as near the base.

#### *Nemozoma fenyese* Van Dyke, new species

Elongate, not quite five times as long as broad, cylindrical, moderately shining, head, pronotum and narrow basal area of elytra black, the greater portion of elytra a bright red, and the antennal club, legs and entire under surface more or less rufous. Head almost as broad as long, deeply sulcate anteriorly as usual but with the frontal margin feebly trisinate, almost transverse, the median portion narrowly and feebly emarginate, not deeply and angularly cleft as in our Pacific Coast species, with distinct and well spaced punctures and the median linear groove not apparent in the sulcus nor at the base of the head; the antennae 11—segmented, reaching the base of the head, with segments 2-8 small, as a whole subsqual in length to the club, the club three-segmented as usual and very distinctly unilaterally dilated; the eyes moderately large but flattened as in the preceding species. Prothorax equal to the head in length, just perceptibly narrower at base, the sides straight and parallel, disk convex, with punctures similar to those of head but finer and denser, side and basal margins fine but distinct. Elytra more than two and a half times as long as broad, striate, the sutural stria well impressed and complete, the discal distinct but the lateral lacking, the striae punctures fine and close together

medially, less regular laterally. Beneath rather finely and sparsely punctured. Length, 7 mm.; breadth, 1.75 mm.

*Holotype* (No. 5427, Mus. Calif. Acad. Sci., Ent.), a unique from the Fenyés' collection of the California Academy of Sciences, collected by Dr. Fenyés at CORDOBA, MEXICO.

This species is very distinct from any of our species, by its color pattern and physical characters, particularly the modifications at the front of the head, and the distinct elytral striation, and from the Guatemalan species, *signatum* Sharp. by the color pattern. Dr. Sharp did not clearly describe the peculiarities of the head in his species but from the illustration given in the "Biologia," I am inclined to believe that *fenyesi* and *signatum* have the front of the head quite similar.

SYNOPTIC TABLE FOR THE SEPARATION OF THE AMERICAN SPECIES OF NEMOZOMA, FOUND NORTH OF MEXICO.

1. Antennae with 10 segments.....*Nemozoma* Latr.  
Very narrow and about six times as long as broad, head broader than prothorax or elytra, black with basal third of elytra orange. Carmel, California, on Monterey pine, Cannon Beach, Ore., on Sitka spruce. 4-4.5 mm.....*attenuatum* Van Dyke
- Antennae with 11 segments.....Subgenus *Monesoma* Lév. 2
2. Pronotum, base of elytra, antennae and legs orange or rufous, the remainder black, from 3-4 times as long as broad. Sierra Nevada Mts. of California and normally on *Libocedrus*, a stray on other conifers. 5-6 mm.....*fissiceps* Fall
- Head and pronotum similarly colored.....3
3. Head and pronotum piceous or somewhat rufous, an orange patch at the base of elytra and another near apex of each elytron, elytra shorter than abdomen, head narrowly grooved in front, not broadly sulcate. Arizona and Yuma, California. 3.5 mm.....*schwarzi* Schaef.
- Head and pronotum black, base of elytra only orange or reddish .....4
4. Larger species, head broadly sulcate in front, rufous patch at base of elytra and not reaching side margins, legs piceous or unicolorous with body beneath, elytral punctures quite irregular. Occidental, Sonoma County, California, on Sargent's cypress. 6.5-7.5 mm.....*cupressi* Van Dyke
- Smaller species, head narrowly sulcate in front, orange patch at base of elytra fully one-third length of elytra and generally reaching side margin, legs somewhat rufous, elytral punctures more or less regularly arranged in rows. Br. Col., Or. and northeastern California, on pines. 4.5-5.5 mm.....*punctulata* Van Dyke

As indicated in the table, *attenuatum* is the only species in our fauna which agrees with the European *elongatum* L., the type of the genus *Nemozoma* of Latreille, in having ten-segmented antennae. Its geographical position is also significant in this connection for it is strictly a member of the Vancouverian insect fauna, the fauna which has in many ways a close relationship to the Eurasian fauna. All our other species have eleven-segmented antennae and hence fall into *Monesoma* of Lèveillé which is generally considered, and I think correctly so, to be but a subgenus of *Nemozoma*. The bulk of the species in the subgenus are confined to the New World: western North America, Mexico, Central and South America. Our Pacific Coast species are somewhat similar in having the head very deeply sulcate in front and angularly divergent apically, also with a somewhat similar color pattern. Our Arizona species, *schwarzi*, is somewhat different in that it has the head narrowly grooved in front, the elytra short and quadrimaculate. The Mexican species, *fenyesi*, which I have described above, differs from all the species found north of it in not having the apex of the head distinctly and triangularly notched but by being almost transverse. The Guatemalan species, *signatum*, I believe also approaches it in this regard.

#### GENUS CORTICOTOMUS SHARP

The members of this genus superficially resemble those of *Nemozoma* and have quite similar habits, also often have similar color patterns. They differ by having the head flattened above or even somewhat concave, with the mandibles directed upward, not downward as in *Nemozoma*, and as discovered by Casey, have the elytra with a perforate foramen within the humeri. It is entirely a New World genus, found in both North and South America. In the Leng Catalogue, the species are correctly placed but in the Coleopterorum Catalogus, they are placed partly in *Nemozoma* and partly in *Corticotomus*. The genus *Parafilumis* Casey with the single species, *estriata* Casey, is very closely related to *Corticotomus* and apparently only differing from *californicus* Van Dyke by having the elytra diffusely punctured, not with the punctures more or less regularly arranged in rows. Three of the species of *Corticotomus* are found on the Pacific Coast, three on the Atlantic Coast, with one subspecies in southern Texas. *Parafilumis* is from Oregon.

*Corticotomus apicalis* Van Dyke, new species

Small, elongate, about four times as long as broad, moderately convex above, more or less flattened as seen from the side, shining black, with antennae, palpi, legs and disk of elytra anteriorly testaceous. Head almost as broad as long, depressed in front and with a feeble yet distinct triangular excavation, apical margin transverse, mandibles prominent and feebly upturned, punctures well impressed and dense in frontal impression, more sparse at base and somewhat aciculate at sides; antennae 11-segmented, reaching several segments behind base of head, segments 2-8 small, gradually broader outwardly, club well developed, distinctly unilaterally dilated, segments 9-10 triangular and eleventh elliptical; eyes of fair size and feebly convex and projecting from the side of head as seen from above. Prothorax somewhat longer than head, rounded at base and with sides straight and parallel, side and basal margins fine but distinct, punctures rather evenly placed and well spaced. Elytra testaceous over three-fourths of area anteriorly and piceous at apex, the dark area extending forward along suture and sides, about one-fourth longer than head and prothorax together, at least twice as long as broad, feebly striate at sides of disk, more obscurely so toward suture and side margin, punctures fine and close in striae, more vague where striae poorly defined, intervals flat and with a series of fine punctures, generally close to the strial punctures giving at times the appearance of double striation, and a perforate foramen within the humeri. Beneath finely, sparsely punctured in front, abdomen quite smooth. Length, 3.5 mm.; breadth, 1 mm.

*Holotype* (No. 5428, Mus. Calif. Acad. Sci., Ent.), from MT. WILSON, CALIFORNIA, August 5, 1924, in the Blaisdell collection of the California Academy of Sciences, and two *paratypes*; ANDERSON'S VALLEY, CALIFORNIA, March 12, 1914, from Sugar pine and MT. ST. HELENA, CALIFORNIA, March 29, 1931, collected by myself from the burrows of *Cryphalus* in Douglas fir. The *paratypes* have the elytral striae less marked than they are in the type.

The specimens mentioned above, I have had set aside for sometime, considering that they perhaps belonged to a pygmy race of *caviceps*. Upon more critically reexamining them, however, I find characters which set them aside from that species. It is not only smaller, but proportionately narrower, more shining, the prothorax longer than broad, about as broad as long in *caviceps*, and with finer and less dense punctuation. The elytra have a different color pattern and are less convex, in fact the entire insect is more depressed, with a dorsoventral measurement much less than in the other.

SYNOPTIC TABLE FOR THE SEPARATION OF THE SPECIES OF  
CORTICOTOMUS FOUND NORTH OF MEXICO

- |   |                                    |
|---|------------------------------------|
| 1. Species bicolored or piceous.....  | 2                                  |
| - Species uniformly castaneous or testaceous, not over 4 mm. in length .....  | 6                                  |
| 2. The prothorax as broad as long.....  | 3                                  |
| 3. Larger species, averaging 5 mm. in length, cylindrical, prothorax rather densely punctured with punctures spaced their own breadth apart, piceous with rufous antennae and legs and a rufous patch extending obliquely inward and backward from base of elytra. Rocky Mountains west to Cascades and Sierra Nevada Mountains. On pines.....                            | <i>caviceps</i> (Fall)             |
| - Smaller species, 4.5 mm. in length, depressed or somewhat flattened, prothorax densely, closely punctured, elytra distinctly striato-punctate, the serial punctures of intervals also quite evident, piceous with rufous antennae and legs, also sometimes head, and a rufous area along the sides of the elytra. New Jersey and adjacent Atlantic States. On pine..... | <i>depressus</i> Schaef.           |
| 4. Distinctly cylindrical with head and pronotum densely, closely punctured, the striae punctures of elytra quite evident at least in front .....   | 5                                  |
| - Somewhat depressed or flattened, head and pronotum black, shining and with punctures as a rule spaced their own width apart, elytra testaceous over basal two-thirds, apex piceous. Calif. on Douglas fir and Sugar pine. 3.5 mm.....   | <i>apicalis</i> new spec.          |
| 5. Head, prothorax, antennae and legs rufous, basal third or more of elytra orange, apical area black. Atlantic States especially the South, on pines. 3-4 mm.....  | <i>cylindricus</i> (Lec.)          |
| - Entire insect above piceous or more or less rufous if somewhat immature. 3-4 mm.....  | <i>cylindricus texanus</i> Schaef. |
| 6. Castaneous or rufous above, legs lighter, head and pronotum finely, sparsely punctured, elytra evidently striato-punctate in front, obsoletely so behind. Penn. and other Atlantic States. 3.25 mm.....  | <i>parallelus</i> (Melsh.)         |
| - Castaneous or testaceous, punctures of head and prothorax numerous but spaced their own width apart, elytra with vague striae and minute, serially arranged punctures over greater part of disk. Northern Calif. on Ponderosa pine. 3-3.5 mm. ....  | <i>californicus</i> Van Dyke       |

**Pseudocotomus Van Dyke, new genus**

Similar to *Corticotomus* Sharp in most particulars such as the elongated and cylindrical form, 11-segmented antennae with enlarged, loose, three-segmented club, slightly upturned mandibles, serial arrangement of elytral punctures, and short legs but differing in the following regards: very small size, head convex above, not flattened or concave, the submentum not distinctly sep-

arable from the gular in front, trisinate anteriorly and with the outer angles extending forward as a tooth or prominent angular process beneath and beyond the base of the antennae and partly overlapping the base of the mandibles, the elytra convex, very markedly alutaceous, without the perforate foramen within the humeri first observed by Casey as so evident in *Corticotomus*, and the serial punctures very distinctly but very shallowly impressed.

Genotype: *Pseudocotomus mclayi* Van Dyke.

*Pseudocotomus mclayi* Van Dyke, new species

Very small, linear and cylindrical, testaceous, legs and antennae lighter in color, moderately shining, the micro-reticulation very evident with good magnification. Head as wide as the prothorax anteriorly and somewhat shorter, with sides parallel behind the eyes, convex above, clypeus with a feeble emargination at center, with deep and well spaced punctures dorsally and laterally; antennae about reaching the base of head, with segments 3-8 small and hardly broader outwardly, together about equal in length to the club which is three-segmented, prominent and bilaterally dilated; eyes moderate in size, granular, and slightly projecting outward from the sides of the head as seen from above. Prothorax about one and a half times as long as wide, rounded at base, with sides straight and feebly diverging to apex where thorax slightly broader than elytra, the apical margin arcuate, disk finely, sparsely punctured with a few minute setae laterally, lateral and basal margins fine. Elytra about two and a half times as long as broad, with sides straight and parallel, apex rounded, disk with sutural striae faintly defined toward apex otherwise without striae but with punctures serially arranged, well spaced, shallowly impressed yet quite evident against the alutaceous background. Beneath slightly darker on after-body and with a few distinct punctures especially at sides of metathorax and with a scattering of setae. Length, 2 mm.; breadth, about .75 mm.

*Holotype* (No. 5429, Mus. Calif. Acad. Sci., Ent.) and eleven paratypes, all reared from the burrows of a Scolytid, *Pseudothy'sanous bartoni* Bruck, in *Malvastrum*, from WESTWOOD HILLS, LOS ANGELES COUNTY, CALIFORNIA, by Arthur T. McClay. The specimens emerged on various dates as October 22, 1936, May 1, 1937 (*Holotype*) and June, 1937. Half of the specimens are now in the McClay collection and half in the collection of the California Academy of Sciences through the kindness of Mr. McClay.